

Mr. Michael Burke
Criterion Catalysts and Technologies, L. P.
1800 East US 12
Michigan City, IN 46360

Re: 091-15164
First Significant Permit Modification to
Part 70 091-6789-00053

Dear Mr. Burke:

Criterion Catalysts and Technologies, L.P. was issued a Title V permit on May 1, 2001 for an alumina powder and specialty chemical production plant. A letter requesting changes in the permit was received on October 30, 2001, with additional information received on December 18, 2001. The changes involve the removal of the requirement for performing daily visible emission observations by Method 9. In addition, the changes include the modification of the normal pressure drop range across the DCC baghouse from 2-4 inches of water to 1-4 inches of water.

326 IAC 2-7-12(d)(1) states that a Significant Permit Modification may be used for "every significant change in existing monitoring Part 70 permit terms or conditions and every relaxation of reporting or record keeping permit terms or conditions". The change in monitoring requirements from a Continuous Opacity Monitor (COM) or Method 9 visual observations, to a non-Method 9 visual observation, constitutes a significant change in monitoring conditions. Therefore, a Significant Permit Modification is being granted as described in the attached Technical Support Document.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this significant permit modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Madhurima Moulik, at (800) 451-6027, press 0 and ask for Madhurima Moulik or extension 3-0868, or dial (317) 233-0868.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

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cc: File -Laporte County
U.S. EPA, Region V
Laporte County Health Department
Northwest Regional Office
Air Compliance Section Inspector - Rick Massoels
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Criterion Catalysts and Technologies, L.P.
1800 East US 12
Michigan City, Indiana 46360-2074**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T091-6789-00053	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: May 1, 2001 Expiration Date: May 1, 2006

First Administrative Amendment No: 091-14560 Issued on: July 26, 2001
Second Administrative Amendment No.: 091- 14707 Issued on: August 24, 2001
Third Administrative Amendment No.: 091-15004 Issued on: November 26, 2001

First Significant Permit Modification No.: 091-15164 Pages Modified: 36, 37	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:

D.3.5 Particulate Matter (PM)

In order to comply with D.3.1 and D.3.2, the baghouse for PM control shall be in operation and control emissions from the DCC drier at all times that the DCC drier is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the DCC drier, at least once per shift when the process is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 4.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instruments Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.7 Monitoring of Emissions and Operations [326 IAC12], (40 CFR 60.730, Subpart UUU)

The source meets the conditions stated by George T. Czerniak, Jr., Chief Air Enforcement and Compliance Assurance Branch of the U. S. EPA in a letter dated May 25, 2000 in an approval of an alternative monitoring requirement, because the stack test conducted on June 12, 1998 demonstrated that the DCC drier emits less than 11 tons per year. Therefore, OAQ waives the requirement for continuous opacity monitoring at the facility or performing daily visible emission observations by Method 9 of Appendix A of part 60. In lieu of these monitoring requirements, the source shall monitor the pressure drop across the baghouse for the DCC drier once per shift to ensure that the pressure drop is within the range of 1 to 4 inches of water. In addition, the source shall perform daily non-method 9 visual stack observations of the baghouse exhaust when in operation.

D.3.8 Baghouse Inspections

An inspection of the baghouses shall be performed each calendar quarter during which the baghouse is operated. In the event that a unit is under production at the end of the quarter and the unit is operating within normal visible emissions levels and pressure drop levels, then the Permittee may postpone the inspection no later than 30 days after the end of the quarter. Defective bags shall be replaced. A record shall be kept of the results of the inspection and the number of bags replaced. This condition replaces operation condition no. 11(d) from the CP 091-8507-00053 issued on July 31, 1997.

D.3.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B - Emergency Provisions).

Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion.

Failure to take response in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired and replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.10 Record Keeping Requirements

- (a) To document compliance with Condition D.3.7, the Permittee shall maintain records of visible emission notations of DCC drier stack exhaust each day of operation.
- (b) To document compliance with Condition D.3.6, the Permittee shall maintain the following:
 - (1) Records once per shift of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) Inlet and outlet differential static pressure; and
 - (B) Cleaning cycle operation.
 - (2) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.3.8, the Permittee shall maintain records of the results of the inspections required under Condition D.3.8 and the dates the vents are redirected.

D.3.11 Reporting Requirements [326 IAC12, (40 CFR 60.730, Subpart UUU)]

Each owner or operator shall submit written reports semiannually of exceedances of control device operating parameters required to be monitored by the condition D.3.7 for monitoring of emissions and operations. For the purpose of these reports, exceedances are defined as follows:

- (i) All periods during which the pressure drop across the baghouse is outside the pressure drop range of 1-4 inches of water or a range established during the latest stack test.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Significant Permit Modification

Source Name:	Criterion Catalysts and Technologies, L. P.
Source Location:	1800 East US 12, Michigan City, IN 46360-2074
County:	Laporte
SIC Code:	2819
Operation Permit No.:	091-6789-00053
Operation Permit Issuance Date:	May 1, 2001
Permit Modification No.:	091-15164
Permit Reviewer:	Madhurima D. Moulik

On January 9, 2002, the Office of Air Quality (OAQ) had a notice published in the News Dispatch in Michigan City, Indiana, stating that Criterion Catalysts and Technologies, L. P. had applied for a Part 70 Significant Permit Modification relating to the operation of a stationary alumina powder and specialty chemical production plant. The notice also stated that OAQ proposed to issue a Significant Permit Modification and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On January 30, 2002, Criterion Catalysts and Technologies, L. P., submitted comments on the proposed significant permit modification. The summary of the comments and corresponding responses is as follows:

1. Comment: The condition D.3.8 states "an inspection of the baghouses shall be performed each calendar quarter". Criterion Catalysts and Technologies, L. P. requested that since the DCC unit will not be in operation for the foreseeable future, this condition be revised to read "an inspection of the baghouses shall be performed each calendar quarter during which the baghouse is operated".

Response: The condition D.3.8 is changed as follows (**bold** to show additions):

D.3.8 Baghouse Inspections

An inspection of the baghouses shall be performed each calendar quarter **during which the baghouse is operated**. In the event that a unit is under production at the end of the quarter and the unit is operating within normal visible emissions levels and pressure drop levels, then the Permittee may postpone the inspection no later than 30 days after the end of the quarter. Defective bags shall be replaced. A record shall be kept of the results of the inspection and the number of bags replaced. This condition replaces operation condition no. 11(d) from the CP 091-8507-00053 issued on July 31, 1997.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	Criterion Catalysts and Technologies, Inc.
Source Location:	1800 East US 12, Michigan City, IN 46360-2074
County:	Laporte
SIC Code:	2819
Operation Permit No.:	091-6789-00053
Operation Permit Issuance Date:	May 1, 2001
Permit Modification No.:	091-15164
Permit Reviewer:	Madhurima D. Moulik

The Office of Air Quality (OAQ) has reviewed a modification application from Criterion Catalysts and Technologies, Inc. relating to the operation of a stationary alumina powder and specialty chemical production plant.

Explanation of Modification

The changes involve the removal of the requirement for a Continuous Opacity Monitor or daily visible emission observations by Method 9. In addition, the changes involve modifying the normal pressure drop range for the DCC baghouse from 2.0-4.0 inches of water to 1.0-4.0 inches of water.

Justification for the Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Permit Modification. 326 IAC 2-7-12(d)(1) states that a Significant Permit Modification may be used for "every significant change in existing monitoring Part 70 permit terms or conditions and every relaxation of reporting or record keeping permit terms or conditions". The change in monitoring requirements from a Continuous Opacity Monitor (COM) or Method 9 visual observations, to a non-Method 9 visual observation, constitutes a significant change in monitoring conditions. Therefore, a Significant Permit Modification will be granted.

Recommendation

The staff recommends to the Commissioner that the Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 30, 2001, with additional information received on December 18, 2001.

Permit Modifications

The following are the changes to the Part 70 Permit No: 091-6789-00053 (~~strikeout to show~~ deletions and **bold** to show additions):

Criterion Catalysts and Technologies, Inc.
Michigan City, Indiana
Permit Reviewer: Madhurima D. Moulik

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(1) The monitoring conditions in Section D.3.6 are modified as follows:

D.3.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the DCC drier, at least once per shift when the process is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of **1.0** ~~2.0~~ and 4.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instruments Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(2) The monitoring conditions in Section D.3.7 are modified as follows:

D.3.7 Monitoring of Emissions and Operations [326 IAC12], (40 CFR 60.730, Subpart UUU)

The source meets the conditions stated by George T. Czerniak, Jr., Chief Air Enforcement and Compliance Assurance Branch of the U. S. EPA in a letter dated May 25, 2000 in an approval of an alternative monitoring requirement, because the stack test conducted on June 12, 1998 demonstrated that the DCC drier emits less than 11 tons per year. Therefore, OAQ waives the requirement for continuous opacity monitoring at the facility **or performing daily visible emission observations by Method 9 of Appendix A of part 60. In lieu of these monitoring requirements, the source shall monitor the pressure drop across the baghouse for the DCC drier once per shift to ensure that the pressure drop is within the range of 1 to 4 inches of water. In addition, the source shall perform daily non-method 9 visual stack observations of the baghouse exhaust when in operation.** ~~In lieu of a continuous opacity monitoring system, a certified visible emissions observer shall measure and record three 6-minute averages of the opacity of visible emissions to the atmosphere each day of operation in accordance with Method 9 of appendix A of part 60.~~

(3) The record keeping requirements in D.3.10 are amended as follows:

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.10 Record Keeping Requirements

- (a) To document compliance with Condition D.3.7, the Permittee shall maintain records of ~~three 6-minute averages of the opacity of~~ visible emission notations of DCC drier stack exhaust each day of operation.
- (b) To document compliance with Condition D.3.6 ~~(and D.3.7 once stack test data is submitted pursuant to Condition D.3.7)~~, the Permittee shall maintain the following:
 - (1) ~~Weekly records~~ **Records once per shift** of the following operational parameters during normal operation when venting to the atmosphere ~~(Records once per shift shall be maintained once stack test data is submitted pursuant to Condition D.3.7):~~

- (A) Inlet and outlet differential static pressure; and

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- (B) Cleaning cycle operation.

- (2) Documentation of the dates vents are redirected.

- (c) To document compliance with Condition D.3.8, the Permittee shall maintain records of the results of the inspections required under Condition D.3.8 and the dates the vents are redirected.

(4) The reporting requirements in Section D.3.11 are amended as follows:

D.3.11 Reporting Requirements [326 IAC12, (40 CFR 60.730, Subpart UUU)]

Each owner or operator shall submit written reports semiannually of exceedances of control device operating parameters required to be monitored by the condition D.3.7 for monitoring of emissions and operations. For the purpose of these reports, exceedances are defined as follows:

- (i) ~~All 6-minute periods during which the average opacity from the dry control is greater than 10 percent.~~
- (ii)(i) All periods during which the pressure drop across the baghouse is outside the pressure drop range of ~~2-4~~ **1.0 - 4.0** inches of water or a range established during the latest stack test.

Conclusion

This permit modification shall be subject to the conditions of the attached Part 70 Significant Permit Modification No. 091-15164-00053.